storage groove **64***a* toward the distal portions, and the distal portions are formed into a flat surface extending parallel to the vertical direction. As shown in **FIG. 10**, the inclination of a lower surface **66***a* of the protrusion **66**, which is a side surface extending from the proximal portion to the distal portion, exposing itself to the bottom side of the cylinder storage groove **64***a* is less steep than an upper surface **66***b*. The protrusions **66** are disposed near the center of the main body **31** in the direction of the shorter side so as to oppose each other, and extend in the direction of the length of the cylinder storage groove **64***a* respectively.

[**0083**] As shown in **FIG. 8** and **FIG. 9**, the cylinder storage groove **64***b* of the holding part **62** is larger than the cylinder storage groove **64***a* in width and depth, and is formed with three protrusions **65** at the bottom thereof. Each pair of protrusions **66** are formed near an upper opening **62***b* of the holding part **62** on the side walls of the cylinder storage groove **64***b* along the length of the cylinder storage groove **64***b* at opposed positions.

[**0084**] The cylinder storage groove **64***c* of the holding part **63** is larger than the cylinder storage groove **64***b* in width and depth, and three protrusions **65** are provided at the bottom thereof. The pairs of protrusions **66** are formed near an upper opening **63***b* of the holding part **63** on the side walls of the cylinder storage groove **64***c* along the length of the cylinder storage groove **64***c* at opposed positions.

[**0085**] The operation of the syringe **2** will be now described.

[**0086**] The syringe **2** is firstly stored in the holding part **61** of the syringe holder **60**. When the syringe **2** is pushed into the holding part **61** from the upper opening **61***b* side so that the flange **12***a* of the cylinder **6** is stored in the flange storage groove **36***a*, the cylinder **6** is inserted therein so as to widen the distance between the protrusions **66**, and is set in the cylinder storage groove **64***a*. After the cylinder **6** has passed, the protrusions **66** return to their original position.

[**0087**] In the stored state, the syringe **2** is supported mainly by the protrusions **65** at the bottom of the cylinder storage groove **64***a*. The cylinder storage groove **64***a* is larger than the syringe **2** so as to keep an allowance.

[**0088**] Likewise, the syringe **3** is stored in the holding part **62**, and the syringe **4** is stored in the holding part **63**. In this state, the respective syringes **3** and **4** are mainly supported by the protrusions **65** of the respective cylinder storage grooves **64***b* and **64***c*.

[**0089**] The syringe holder **60** in which the syringes **2**, **3** and **4** are stored is placed in the sterilized package, and is subjected to sterilizing treatment together with the balloon catheter **40** and the like. At this time, since there are sufficient allowances between the syringes **2**, **3** and **4** and the holding parts **61**, **62** and **63**, respectively, and the contact areas between the syringes **2**, **3** and **4** and the holding parts **61**, **62** and **63** are kept to minimum areas owing to the protrusions **65**, **66**, gas can easily run through. Furthermore, since the flange storage grooves **36***a*, **36***b* and **36***c* and the plunger storage grooves **37***a*, **37***b* and **37***c* are formed into inclined surfaces or surfaces having a radius of curvature different from the syringes **2**, **3** and **4** so as to form the clearances with respect to the syringes **2**, **3** and **4**, gas can easily run through. Therefore, the syringes **2**, **3** and **4** are reliably sterilized by sterilizing gas.

[**0090**] In this embodiment, since the holding parts **61**, **62** and **63** are formed so as to assure sufficient allowances with respect to the syringes **2**, **3** and **4**, the clearances between the holding portions **61**, **62**, **63** and the syringes **2**, **3**, **4** are secured, whereby the syringes **2**, **3** and **4** can be reliably sterilized. In particular, since the contact areas with respect to the syringes **2**, **3** and **4** are reduced by means of the protrusions **65** and **66**, sterilization of the syringes **2**, **3** and **4** can be reliably performed.

[**0091**] Also, since the allowances are formed with respect to the syringes **2**, **3** and **4**, and the distal ends of the respective syringes **2**, **3** and **4** are exposed, the syringes **2**, **3** and **4** can easily be taken out.

[**0092**] Referring to the drawings, a third embodiment of the invention is now described. The same components as the above-described embodiments are represented by the same reference numerals. Description overlapped with the above-described embodiments will be omitted.

[**0093**] This embodiment relates to a modification of the holding part.

[**0094**] As shown in **FIG. 11**, holding parts **71**, **72** and **73** of a syringe holder **70** respectively have cylinder storage grooves **74***a*, **74***b* and **74***c* that are substantially oval in cross-section.

[**0095**] The cylinder storage groove **74***a* is configured in such a manner that the portion near an upper opening **71***b* is protruded so as to be close to each other, so that protrusions **75***a* are formed, and the bottom side is formed as an oval shape. The number of contact portions between an inner wall of the cylinder storage groove **74***a* and the cylinder **6** are three positions at maximum, including one on the bottom side and two on the side of the protrusions **75***a*. Each of them is subjected to linear contact. Other portions of the syringe **2** are not in contact with the holding part **71** and clearances are formed.

[**0096**] The cylinder storage groove **74***b* of the holding part **72** is larger than the cylinder storage groove **74***a*, is provided with protrusions **75***b* near an upper opening **72***b*, and is oval shaped on the bottom side. The cylinder storage groove **74***c* of the holding part **73** is larger than the cylinder storage groove **74***b*, is provided with protrusions **75***c* near an upper opening **73***b*, and is oval shaped on the bottom side.

[**0097**] Cylinder storage grooves **81**, **82** and **83** as shown in **FIG. 12** may be provided.

[**0098**] The cylinder storage groove **81** is substantially formed into a cross-shape with reference to an upper opening **81***b*. The cylinder **6** is mainly stored in a center portion of the cylinder storage groove **81**, and clearances are defined with respect to the cylinder **6** by extended portions **81***a* extending in four directions from the center portion. The respective corners which correspond to the proximal ends of the extended portions **81***a* come into linear contact with the cylinder **6** at four positions at the maximum.

[**0099**] The cylinder storage groove **82** is substantially formed into a T-shape with reference to an upper opening **82***b*. The width of the upper opening **82***b* is smaller than the cylinder **22**. The bottom side is increased in width, and this widened portion **82***a* defines clearances with respect to the cylinder **22**. The cylinder storage groove **82** is configured to come into linear contact with the cylinder **22** at three